Exhibit 09: U.S. Patent No. 9,292,066

Claims	Identification
1[pre] A method for an upstream device to configure a plurality of lines in a cable, the method comprising:	To the extent the preamble is limiting, ASUS-branded devices perform a method for an upstream device to configure a plurality of lines in a cable. 

Claims	Identification
	

Claims	Identification
	https://www.asus.com/us/accessories/docks-dongles-and-cable/asus-docks-dongles-and-cable/asus-dual-4k-usb-c-dock; https://shop.asus.com/us/90xb07f0-bds000-asus-dual-4k-usb-c-dock.html.

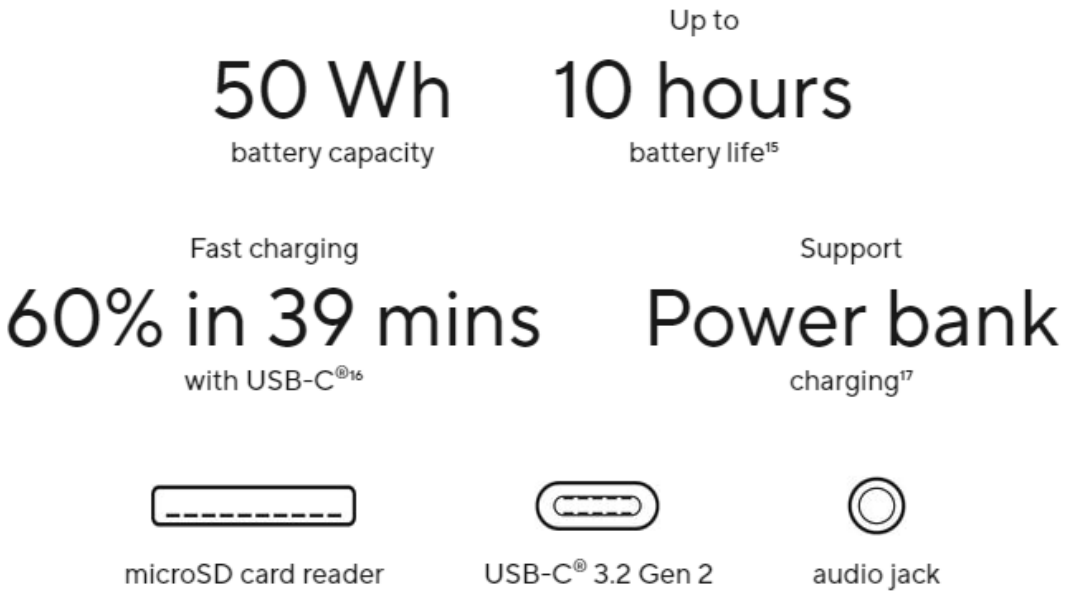
Claims	Identification
	 ASUS Vivobook 13 Slate OLED Your speedy PC, your brilliant entertainment center

Claims	Identification

BATTERY

Lasts longer, charges faster

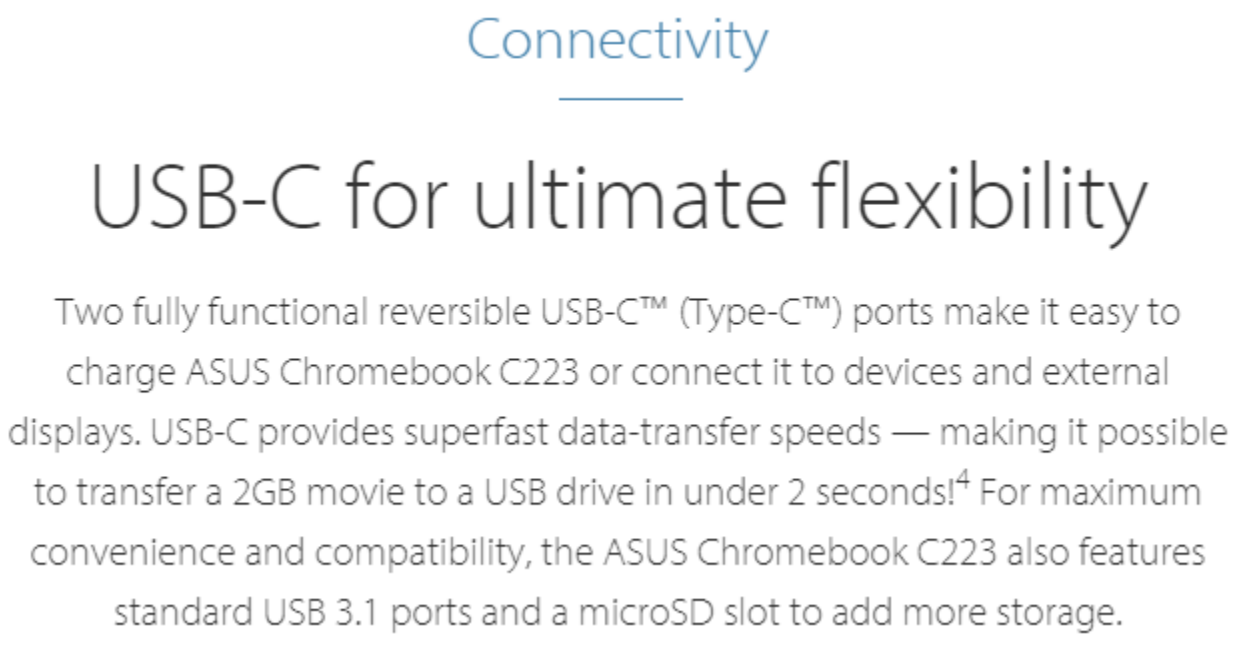
Vivobook 13 Slate OLED is perfect for those movie-watching marathons! Its 50 Wh battery keeps you going to the credits and beyond, with over 10 hours of battery life on a single charge, so your viewing will be interruption-free. But if you do need a quick boost, it can reach 60% charge in just 39 minutes via the fast-charging USB-C® port. With USB-C® Easy Charge, you can even charge your laptop from a wide range of 5-20V USB-C® chargers including airline chargers or power banks!



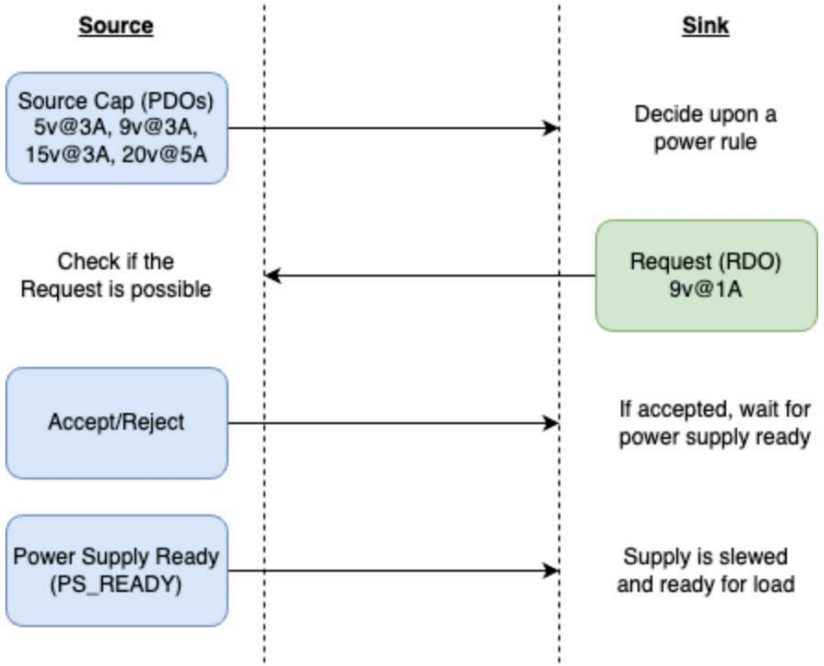
https://www.asus.com/us/laptops/for-home/vivobook/asus-vivobook-13-slate-oled-t3304.

ASUS **Chromebook** C223

Travel lighter, work faster

Claims	Identification
	 https://www.asus.com/us/laptops/for-home/chromebook/asus-chromebook-c223; https://www.asus.com/us/accessories/adapters-and-chargers/asus-adapters-and-chargers/asus-ac65-00-65w-usb-type-c-adapter.
1[a] the upstream device placing a first voltage on a first one of the lines, the first one of the lines traditionally specified to supply power;	ASUS-branded devices implementing the USB Type-C specification include the upstream device placing a first voltage on a first one of the lines, the first one of the lines traditionally specified to supply power, for example by applying a first voltage on the VBUS pin: **4.2.4 Power and Ground Pins** **VBUS** — These pins are for USB cable bus power as defined by the USB specifications. VBUS is only present when a Source-to-Sink connection across the CC channel is present – see Section 4.5.1.2.1. Refer to Section 4.4.2 for the functional requirements for VBUS. Universal Serial Bus Type-C Cable and Connector Specification Release 2.3 at 144; Release 2.0 at 139.

Claims	Identification
	4.4.2 VBUS The allowable default range for VBUS as measured at the Source receptacle ***shall*** be as defined by the ***USB 2.0*** and ***USB 3.2*** specifications. For ***USB4***, the ***USB 3.2*** specification is used for this requirement. NOTE that due to higher currents allowed, legacy devices ***may*** experience a higher voltage (up to 5.5V maximum) at light loads. The Source's USB Type-C receptacle VBUS pin ***shall*** remain unpowered and ***shall*** limit the capacitance between VBUS and GND as specified in Table 4-2 until a Sink is attached. The VBUS pin ***shall*** return to the unpowered state when the Sink is detached. See Table 4-32 for VBUS timing values. Legacy hosts/chargers Universal Serial Bus Type-C Cable and Connector Specification Release 2.3 at 144; Release 2.0 at 141.
1[b] the upstream device grounding a second one of the lines, the second one of the lines traditionally specified to be a ground line;	ASUS-branded devices implementing the USB Type-C specification include the upstream device grounding a second one of the lines, the second one of the lines traditionally specified to be a ground line for example by utilizing a ground pin: **4.2.4 Power and Ground Pins** VBUS — These pins are for USB cable bus power as defined by the USB specifications. VBUS is only present when a Source-to-Sink connection across the CC channel is present – see Section 4.5.1.2.1. Refer to Section 4.4.2 for the functional requirements for VBUS. VCONN — VCONN is applied to the unused CC pin to supply power to the local plug. Refer to Section 4.4.3 for the functional requirements for VCONN. GND — Return current path. Universal Serial Bus Type-C Cable and Connector Specification Release 2.3 at 144; Release 2.0 at 139.
1[c] the upstream device receiving a request from a downstream device for a second voltage, the second voltage for supplying power, on a third one of the	ASUS-branded devices implementing the USB Type-C specification include the upstream device receiving a request from a downstream device for a second voltage, the second voltage for supplying power, on a third one of the lines, the third one of the lines traditionally specified to convey data, for example, because the USB Type-C specification supports requests for additional power (a second voltage) via the VCONN pin. Specifically, the upstream device (source) receives a request from the downstream devices (sink) via the following flow:

Claims	Identification
lines, the third one of the lines traditionally specified to convey data;	 Figure 1: Basic Power Negotiation https://acroname.com/blog/basics-usb-power-delivery-negotiations 6.4.2.1 Object Position The value in the Object Position field ***Shall*** indicate which object in the ***Source_Capabilities*** Message or ***EPR_Source_Capabilities*** Message the RDO refers to. The value 0001b always indicates the 5V Fixed Supply PDO as it is the first object following the ***Source_Capabilities*** Message or ***EPR_Source_Capabilities*** Message Header. The number 0010b refers to the next PDO and so forth. The value in Object positions 0001b-0111b ***Shall*** only be used to refer to SPR PDOs. SPR PDOs ***May*** be requested by either a ***Request*** or an ***EPR_Request*** Message. Object positions 1000b-1101b ***Shall*** only be used to refer to EPR PDOs. EPR PDOs ***Shall*** only be requested by an ***EPR_Request*** Message. If the Object Position field in a ***Request*** message contains a value greater than 0111b, the Source ***Shall*** send ***Hard Reset*** Signaling. USB_PD_R3_1 V1.7 2023-01

Claims	Identification

Figure 2-1 USB Type-C Receptacle Interface (Front View)

A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12
GND	TX1+	TX1−	VBUS	CC1	D+	D−	SBU1	VBUS	RX2−	RX2+	GND
GND	RX1+	RX1−	VBUS	SBU2	D−	D+	CC2	VBUS	TX2−	TX2+	GND
B12	B11	B10	B9	B8	B7	B6	B5	B4	B3	B2	B1

Figure 2-2 illustrates the comprehensive functional signal plan for the USB Type-C plug. Only one CC pin is connected through the cable to establish signal orientation and the other CC pin is repurposed as VCONN for

powering electronics in the USB Type-C plug. Also, only one set of ***USB 2.0*** D+/D− wires are implemented in a USB Type-C cable. For USB Type-C cables that only intend to support ***USB 2.0*** functionality, the TX/RX and SBU signals are not implemented. For the USB Type-C Power-Only plug (intended only for USB Type-C Sink applications), only nine contacts are implemented to support CC, VBUS, and GND.

Universal Serial Bus Type-C Cable and Connector Specification Release 2.3 at 34-35; Release 2.0 at 30-31.

2.3.5 *USB PD* Communications

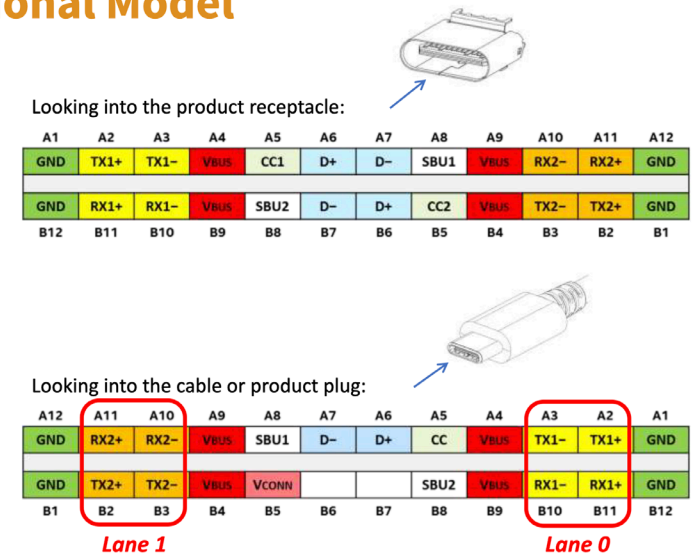
USB Power Delivery is a feature on products (hosts, hubs, and devices). ***USB PD*** communications is used to:

- establish power contracts that allow voltage and current beyond existing USB data bus specifications,
- change the port sourcing VBUS,
- change the port sourcing VCONN,
- swap DFP and UFP roles, and
- communicate with cables.

The ***USB PD*** Bi-phase Mark Coded (BMC) communications are carried on the CC wire of the USB Type-C cable.

Universal Serial Bus Type-C Cable and Connector Specification Release 2.3 at 38; Release 2.0 at 35.

Claims	Identification

	2.5 VCONN
	
	Once the connection between host and device is established, the CC pin (CC1 or CC2) in the receptacle that is not connected via the CC wire through the standard cable is repurposed to source VCONN to power circuits in the plug needed to implement Electronically Marked Cables (see Section 4.9), ***VCONN-Powered Accessories*** and ***VCONN-Powered USB Devices***. Initially, the source supplies VCONN and the source of VCONN ***may*** be swapped using ***USB PD VCONN_Swap***.
	
	Once VCONN is available, all electronically marked cables use it as the only power source. If VCONN is applied after VBUS, then until VCONN is available, the cable ***may*** remain unpowered or ***may*** draw power from VBUS.
	
	Universal Serial Bus Type-C Cable and Connector Specification Release 2.3 at 39; Release 2.0 at 36.
	
	USB Type-C® – Functional Model
	
	• USB 3.2 / *USB4™* data bus
	  • Two sets of TX/RX pin pairs, supports x1 and x2 operation
	• USB 2.0 data bus
	  • Two pin sets on host, one set on device – strapped together within the host and device
	• Two power buses
	  • VBUS and VCONN
	• Two sideband pins (SBU1/SBU2)
	  • *SBTX / SBRX for USB4*
	• CC – Configuration Channel
	  • Two CC pins in connector
	  • One CC wire in cable
	
	 
	
	9 USB Implementers Forum © 2019
	
	https://www.usb.org/sites/default/files/D1T1-2%20-%20USB%20Type-C%20System%20Overview.pdf
	
	When delivering power via the VCONN pin, the voltage is supplied via either the CC1 or CC2 pin, which is traditionally used to convey data via the control channel.

1[d] the upstream device placing on the third one of the	ASUS-branded devices implementing the USB Type-C specification include the upstream device placing on the third one of the lines the second voltage for supplying power, for example, by the VCONN sending additional power (a second voltage).

Claims	Identification
lines the second voltage for supplying power.	**2.3.5 *USB PD* Communications** ***USB Power Delivery*** is a feature on products (hosts, hubs, and devices). ***USB PD*** communications is used to: • establish power contracts that allow voltage and current beyond existing USB data bus specifications, • change the port sourcing VBUS, • change the port sourcing VCONN, • swap DFP and UFP roles, and • communicate with cables. The ***USB PD*** Bi-phase Mark Coded (BMC) communications are carried on the CC wire of the USB Type-C cable. Universal Serial Bus Type-C Cable and Connector Specification Release 2.3 at 38; Release 2.0 at 35. VCONN — VCONN is applied to the unused CC pin to supply power to the local plug. Refer to Section 4.4.3 for the functional requirements for VCONN. Universal Serial Bus Type-C Cable and Connector Specification Release 2.3 at 144; Release 2.0 at 139.